TPMC-8X-GA

8.4” WiFi Touch Screen

- *Stylish and compact ergonomic design*
- *8.4” active matrix touch screen display*
- *800 x 600 SVGA display resolution*
- *Smart Graphics™ support*
- *Automatic display brightness control*
- *High-performance 802.11a/b/g Wi-Fi wireless communications*
- *Up to 80 feet omnidirectional RF range[5]*
- *Onboard PC applications for Web browsing, playing digital media, and viewing digital documents*
- *VNC viewer for remotely accessing and controlling external computers*
- *Native H.264 streaming video for viewing Web cameras and HD sources*
- *Rava™ SIP Intercom and phone technology*
- *Customizable audio feedback*
- *High-powered speakers, headphone jack, and microphone*
- *5-way thumbpad, up/down arrow buttons, and 4 “hard keys”*
- *Stylus with built-in storage slot*
- *On-screen mouse and keyboard capability*
- *USB port for external mouse and keyboard[4]*
- *Intelligent power management with “wake on touch”*
- *Internal Li-Ion battery pack included*
- *External “booster” battery pack available[1,7]*
- *Optional desktop and wall mount docking stations[1,8]*

Sleek, rugged, and lightweight, the TPMC-8X-GA from Crestron® is brilliantly designed to provide a powerful mobile control solution that’s easy to hold and intuitive to use. This stylish Wi-Fi touch screen offers enhanced wireless performance, onboard multimedia and Web browsing, high-performance H.264 video, Rava™ SIP Intercom, audio feedback, and advanced Smart Graphics™. Its brilliant 8.4” SVGA display and high-powered speakers afford an amazing personal media experience on top of its astounding custom control capabilities.

Advanced Touch Screen Control

A Crestron touch screen offers an ideal user-interface for controlling all the technology in your home, boardroom, classroom, courtroom, or command center. Touch screens do away with piles of remote controls, cluttered wall switches, and cryptic computer screens, simplifying and enhancing the way you use technology. Crestron touch screens are fully-customizable for controlling audio, video, lighting, shades, HVAC, security, and other systems — with easy-to-use controls and icons, true feedback and real-time status display, full-motion video windows, and advanced navigation of digital media servers, tuners, and other devices.

Smart Graphics™

Crestron touch screens use Smart Graphics to deliver the ultimate user experience *and* the ultimate value by enabling the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Smart Graphics, programmers can swiftly integrate fluid gesture-driven controls, animated feedback, metadata, embedded apps, and full-motion video for a deeply engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics include the following enhancements:

- Cool-looking graphical buttons, sliders, knobs, and gauges are intuitive and fun to use.
- Kinetic effects enhance the feeling of realism with lists and toolbars that scroll with momentum at the flick of a fingertip.
- Drag-and-drop objects snap into place offering an easy way to switch sources.
- Dashboard widgets personalize the touch screen with clocks, weather, news, and other information.
- Customizable themes allow a completely different look and feel for every user, event, or season.
- Fully-developed SmartObjects™ enable sophisticated control over complex devices with minimal programming.

Wireless Streaming Video

Streaming video capability makes it possible to view security cameras and other video sources over the network right on the touch screen display. Native support for H.264 and MJPEG formats allows the TPMC-8X-GA to display live video images from IP cameras and servers such as the Crestron CEN-NVS200 Network Video Streamer[1]. And, through its embedded Web browser and media player, it supports a wide variety of other streaming and downloadable video formats, enabling access to all kinds of content from media servers and Web sites like YouTube® and Netflix®[2].

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Rava™ SIP Intercom

Rava SIP Intercom Technology enables hands-free VoIP communication between any two Rava-enabled Crestron touch screens. Rava works over Wi-Fi or wired Ethernet, supporting 2-way intercom, video intercom[3], paging, and room monitoring without any special wiring. VoIP phone capability is also possible through integration with an SIP-compatible IP phone system or SIP server, allowing hands-free telephone functionality complete with speed-dialing, caller ID, custom ringers, and other enhancements. Built-in echo cancellation affords true-duplex performance for clear, seamless voice communication using the TPMC-8X-GA’s integrated microphone and speakers.

Embedded PC Applications

The TPMC-8X-GA provides everything you need to enjoy online music and videos, browse the Internet, and even review digital documents without a separate computer. With Microsoft® Internet Explorer® embedded, you have full access to the entire World Wide Web including sites that use Flash® or Java®. Windows Media® Player ensures broad compatibility with most types of digital media, and lets you use the TPMC-8X-GA as a personal media player. Adobe® Acrobat® Reader and Microsoft PowerPoint®, Word, and Excel® document viewers complete the online experience, allowing you to download and view documents and presentations.

In addition, VNC Viewer support delivers enhanced cross-platform interaction with computers over the network or Internet, allowing remote access and control of desktop applications to unleash a host of possibilities for system integration and multimedia presentation.

Speakers and Microphone

High-powered built-in speakers and headphone output provide loud and clear audio for enjoying multimedia, as well as for intercom and phone in combination with the integrated microphone. Customized audio files can also be loaded on the TPMC-8X-GA to add dimension to the touch screen graphics with personalized sounds, button feedback, and voice prompts.

Tactile Controls

The integrated 5-way thumbpad and up/down arrow buttons afford quick-access and tactile response for controlling functions such as volume adjustment, channel selection, on-screen menu navigation, and even pan/tilt/zoom camera control. Four additional “hard key” buttons are positioned below the touch screen, programmable for functions that can change right along with the virtual controls on the touch screen. A stylus is even included for use with the on-screen keyboard, conveniently stowed in its own storage slot.

Keyboard/Mouse Options

On-screen keyboard and mouse capabilities enable complete control of the TPMC-8X-GA’s embedded Web browser and other applications. It can also be used to control computers running TouchPoint® Virtual Mouse & Keyboard Software (VMK-WIN). A USB port is also provided for the connection of a physical keyboard and mouse[4].

Wi-Fi Performance—Redefined!

Crestron has redefined Wi-Fi wireless performance with the TPMC-8X-GA, achieving a remarkable 80 feet omnidirectional range[5] for exceptional freedom of movement. The choice of 802.11 a, b, and g protocols affords reliable, high-speed 2-way wireless performance in virtually any RF environment. It takes mere minutes to configure the TPMC-8X-GA for use with a Crestron CEN-WAP-ABG Wireless Access Point[1] for a simple, secure Wi-Fi touch screen network solution.

Battery-Saving Enhancements

Fast-charging, long-lasting wireless operation is afforded by an internal field-replaceable Lithium Ion battery pack (TPMC-8X-BTP[6]). Over 9 hours of typical use is possible between charges thanks to intelligent onboard power management and auto-brightness control.

- Auto-Brightness - smoothly maintains optimal visibility under varying lighting conditions while preserving precious battery life.
- Standby Mode - turns off the touch screen display to save power while the hard buttons remain active. Lets you adjust volume or change channels by pressing a hard button without waking the screen.
- Power Down Mode - suspends the touch screen during prolonged periods of non-use. Lets you wake the touch screen by simply touching the screen or pressing the side “Power” button.
- Class D Amplifier - provides loud and clear audio without draining the battery.

An external “booster” battery pack is also available, providing up to 20 hours of typical use between charges.[7] The optional external battery pack (TPMC-8X-BTPE[1]) clips neatly to the rear of the touch screen without tools, providing non-slip rubber feet and a 7 degree tilt for enhanced tabletop operation.

Docking Station Options

Optional desktop and wall mount docking stations are offered, each designed to enable full use of the touch screen while charging its battery (or batteries). The Desktop Docking Station (TPMC-8X-DS[1]) allows the touch screen to be operated upright at a 37 degree angle, while the Wall Mount Docking Station (TPMC-8X-DSW[1,8]) achieves a flush in-wall appearance. Both options afford wired Ethernet and expanded USB connectivity. The wall mount option also includes an audio output for integration with an external sound system.

SPECIFICATIONS

Touch Screen Display

Display Type: TFT active matrix color LCD
Size: 8.4 inch (213 mm) diagonal
Aspect Ratio: 4:3 SVGA
Resolution: 800 x 600 pixels
Brightness: 200 nits (cd/m2)
Contrast: 500:1
Color Depth: 18-bit, 262k colors
Illumination: Edgelit fluorescent w/auto-brightness control
Viewing Angle: ±65° horizontal, +65°/-45° vertical
Touch Screen: Resistive membrane

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Buttons & Switches

Hard Keys: (4) programmable pushbuttons below touch screen
Thumbpad: (1) programmable 5-way thumbpad (4-way navigation plus center “ENTER” button)
Arrows: (2) programmable up/down pushbuttons
Power (left side): (1) pushbutton, initiates “Power On” and “Power Down”
Battery: (1) Recessed slide switch inside battery compartment, shuts off battery for long-term storage

LED Indicators

Power: (1) Green LED, indicates touch screen power status
Battery: (1) Green/yellow dual-color LED, indicates battery condition and charging status
Wi-Fi: (1) Green LED, indicates wireless network connection status

Memory

DDR2 SDRAM: 1 GB
Flash: 4 GB
Memory Card: Accepts up to 32 GB MMC compatible card (not included)
Maximum Project Size: 190 MB

Graphics Engine

Supports Smart Graphics™ or “traditional” GUI projects

Embedded Applications

Microsoft® Internet Explorer® w/Adobe® Flash® plug-in and Java® Runtime plug-in, Windows Media® Player, VNC Viewer, Remote Desktop, Adobe Acrobat® Reader, WordPad, MS Word Viewer 2003, Excel® Viewer 2003, PowerPoint® Viewer 2003

Wireless Communication

Transceiver: IEEE 802.11a/b/g Wi-Fi (5.8 or 2.4 GHz 2-way RF), static IP or dynamic IP via DHCP, 64 and 128-bit WEP encryption
Range: Up to 80 feet (24.4 m) omnidirectional using 802.11 b/g, 35 feet (10.7 m) omnidirectional using 802.11a, @54Mbps; range and speed vary based upon environmental conditions
Gateway: Requires a CEN-WAP-ABG-1G, CEN-WAP-ABG-CM, or similar 802.11a/b/g wireless access point and Ethernet-enabled Crestron control system
Roaming: Requires a Cisco® controller solution to be installed and commissioned by a Cisco certified technician.

Wired Communication

Ethernet: (Via optional docking station) 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP
USB: USB 2.0 host for mouse, keyboard, and USB storage devices

Video

Streaming/File Formats: H.264 (MPEG-4 part 10 AVC), MJPEG, plus other formats as supported by Windows Media Player

Audio

Features: Built-in microphone and speakers, headphone output, Rava™ SIP Intercom, Crestron IP Intercom
Streaming/File Formats: As supported by Windows Media Player
Audio Feedback Formats: MP3 using Smart Graphics, WAV using “traditional” graphics
Amplification: High-efficiency Class-D stereo 2.1 Watts per channel

Connectors

HEADPHONES: (1) 3.5 mm TRS mini phone jack;
Stereo headphone output

USB: (1) USB Type A female;
USB 2.0 port for keyboard, mouse, and storage devices

12V 3.5A: (1) 2.5 x 5.5 mm DC power connector;
12 Volt DC power input (power pack included)

MEMORY CARD: (1) MMC compatible card slot inside battery compartment; Accepts up to 32 GB MMC (not included)

Battery

Internal Battery: Lithium Ion, 7.4 Volt, 2200 mAh, Crestron model TPMC-8X-BTP included
Usage per Charge: ~1.5 hours continuous, 9+ hours under normal use with Standby/Power Down activated[7]
Charging Time: ~2 hours (~2.5 to 3 hours when in use)

Power Requirements

Power Pack: 3.5 Amps @ 12 Volts DC;
100-240 Volts AC, 50/60 Hz power pack included

Environmental

Operating Temperature: 32° to 104°F (0° to 40°C)
Storage Temperature: 14° to 140°F (-10° to 60°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 143 BTU/Hr

Enclosure

Construction: Plastic front and metal back, stylus storage slot (stylus included), integral docking station port

Dimensions

Height: 8.21 in (209 mm)
Width: 9.69 in (247 mm)
Depth: 1.13 in (29 mm);
1.67 in (43 mm) with external battery pack[1]

Weight

1.98 lb (0.90 kg)

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MODELS & ACCESSORIES

Available Models

TPMC-8X-GA: 8.4” WiFi Touch Screen

Included Accessories

TPMC-8X-BTP: Internal Battery Pack (Qty. 1 included)

Available Accessories

TPMC-8X-DS: Desktop Docking Station
TPMC-8X-DSW: Wall Mount Docking Station
TPMC-8X-BTPE: External Battery Pack
CEN-WAP-ABG-1G: Wall Mount 802.11a/b/g Wireless Access Point
CEN-WAP-ABG-CM: Ceiling Mount 802.11a/b/g Wireless Access Point
CEN-NVS200: Network Video Streamer
SW-VMK-WIN: TouchPoint® Virtual Mouse & Keyboard Software for Windows®

Notes:

1. Item(s) sold separately.
2. Accessing Netflix content requires an active Netflix account. See www.netflix.com for details.
3. H.264 compatible IP camera required.
4. USB mouse/keyboard not included.
5. See specifications for full wireless range details.
6. Item included; see individual product specifications for complete details.
7. External battery pack allows ~3.5 hours continuous, 20+ hours under normal use.
8. Requires TPMC-8X-DSW, Material # 6504859. Owners of an older model TPMC-8X-DSW must contact Crestron Customer Support to acquire the TPMC-8X-DSW BEZEL CONVERSION KIT, Material # 6505136.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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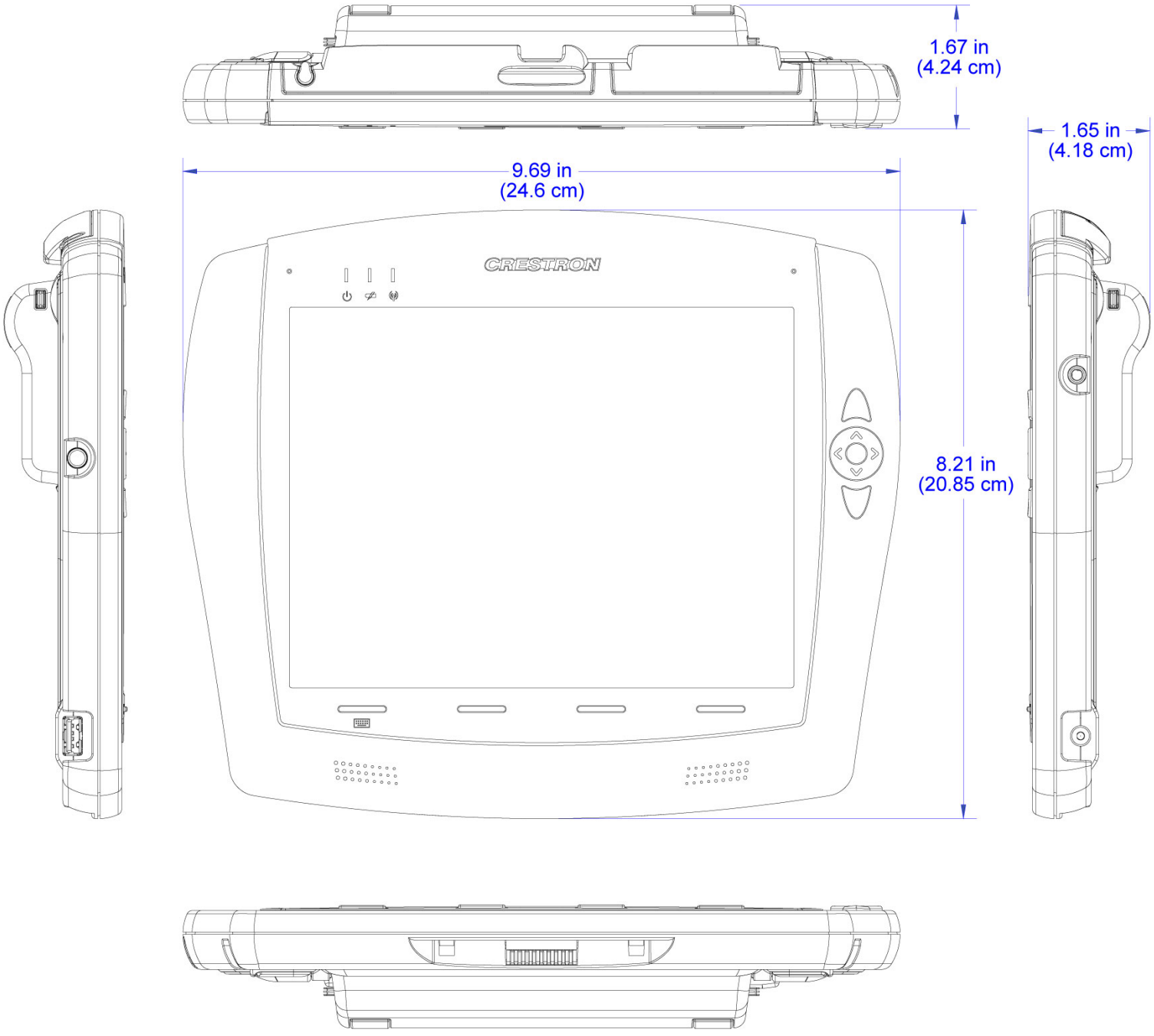

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